

First and Final Bill.

M. A. R. 57 (Rule 116)
Measurement Book

No. E

558929

Serial No.

Name of work From To

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions			Contents	Reference to last Measurement
		Number	Length	Breadth		
1	2	3	4	5	6	7
	Name of work : <u>Improvements to roads and surrounding areas in road No. 08, Kodigehalli.</u>					Tatanagaga, Devinagaga
	Name of Agency : <u>K. M. Nagesh.</u>					
	Job Code No : <u>008-22-000003</u>					
	Work order No : <u>BEMP/EE/BTP/20/60/2021-22</u>					dated: 18.03.2022
	Estimate Cost : <u>Rs = 100.00 lakhs</u>					
	Measurement recorded on : <u>31.05.2022</u>					
	Item No: <u>✓ Earthwork excavation by manual means for roads, drains and similar works in ordinary soil excavated surface levelled and sides neatly dressed, the</u>					

MEASUREMENT BOOK

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2 disposed earth to be levelled neatly after breaking of clods complete as per specifications. (e bill page no 1-2)	3	4	5	6	7	8
Item No:2 Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 250kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum machine mixed, concrete laid in layers not exceeding 15cms thick, well compacted, in foundation including cost of all materials, labours, Htm of machinery, curing complete as per specifications. (e bill page no-2)						
				@TR	952.44 cum 215.28	205041.28/-
				@TR	126.78 cum 5989.25	759317.11/-

55830

Date of commencement of work.

To

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1		3	4	5	6	7	8
	PCC M20 grade upto 0.75m height (e bill page no 3 to 4)			using	concrete mixture.		
	Item No:5 Supplying and fixing Precast reinforced concrete slab 10cm thick of M20 using 29mm and downsize dia at 150mm c/c bothways cast, machine cutting, the vertical face to get plain even surface etc, complete with all leads and lifts conveyance charges, labour charges, inclusive of all cost (e bill page no 4 to 5)			graded metal using transportation, hire charges of machinery			
					@TR	280.91 cum 1729.68	= 2171341.59/-
					@TR	2337.00	= 1586846.37/-

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558931

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Name of work

Name of Contractor of nature of Agency

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From To

Date	Full description, etc, of work	Dimensions			Contents	Reference to last Measurement
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1	2	3	4	5	6	7
	Item No: 6 Providing and laying precast drain of M20 using 20mm and downsize including form work, lift charges, curing and concrete both sides etc complete as per drawing and directions of Engineer-in-charge (Bill page no. 5)					Cover slab of 250mm thick using reinforcement
	Item No: 7 Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 248 kgs, and fine aggregates @ 0.69 cum and 15cm thick well compacted, in foundation, plinth					38.88 cum. @TR 5418.00 = 210651.84/-

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1		3	4	5	6	7	8
	and cills, including cost of all materials, labour, H.O.M of machinery, curing complete as per specifications. (cill page no. 4)					7.40 Cum	
	Item No: 8 Providing and fixing pre cast solid cement concrete kerb stone made out of CC 1:2:4 with top and bottom width 114 and 165mm respectively 400mm high, 450mm in length finished with cm 1:3 plastering and finishing cutting including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc complete. (cill page no. 6)					6214.89	46434.18/-
						432.48	355498.56/-

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	<u>Item No: 9</u> Providing and applying painting in two coats with plastic emulsion paint of approved brand on road surface, free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications - with primer. c/bill page no- 8					8
	<u>Item No: 10</u> Excavation of road work in all types of soil by mechanical means including cutting and loading to tipper, trimming bottom and side slopes in accordance with requirements of lines, grade and cross section and transportation					

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	with a lead of 5km (e 6/11 Page no. 5)						
	Item NO. 11 Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes powder roller including filling in depression occurring during rolling including cost of all labours, from of machinery complete as per specifications. (e 6/11 Page no. 5)						
					@TR	188.25 Cam. 63.94 = 12036.70/-	
					@TR	627.50 Sym. 6.36 = 3990.90/-	
	Item NO. 12 Providing, laying, spreading and compacting crushed stone aggregates of granite trap basalt to wet mix macadam specifications including pre-						

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1	2	3	4	5	6	7	8
	mining the material with water at one in mechanical mix plant cascade of mixed method of tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with Vibratory roller to achieve the desired density complete as per specifications. (see bin page no. 5)						
	Item NO:13 cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials, labours, How of machineries complete as per specifications.						
						@TR 2001.28 = 94.12 Cum. 188360.47/-	

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	<u>Item NO:14</u> Providing and applying Primer coat with 5.5. bitumen emulsion on prepared surface of granular base such as road surface and spraying primer at the rate of 0.60kg/sqm using mechanical means complete (e bill page No 6)					@TR 2125.00 5.30 = 14442.50/-	
	<u>Item NO:15</u> Providing and laying bituminous macadam on prepared surface with crushed coarse aggregates as per design mix formula for base 1 binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates					@TR 627.50 33.92 = 21284.80/-	

M. A. R. 57 (Rule 116)
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1	2	3	4	5	6	7
	transporting the mixed material in tipper to paves and laying mixed materials with paves finishes to the required level and grade, rolling by power roller to achieve the desired density, but excluding cost of primer/tack coat including lead, lift and cost of all materials, labour, H.M. of machineries complete as per specifications. NORTH Chapter 5 - Using 40k0 TPH Capacity H.M.P. with mechanical paves Gr-II (50mm to 75mm) with 3.3% VG-30 Bitumen. (e bill page no - 15)					
						49.08 Cum.
						@TR 8545.12 = 419423.93/-
						Item No: 16 Providing and applying tack coat using 80/100 grade bitumen (VG 10) on the prepared black topped surfaces at 2.5 kg per 10sqm,

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	heating bitumen in boilers fitted with spray road surface) including cost of all material, Complete, as per specifications. (Bill Page no 16)					Set (excluding cleaning of labours, NOM of machinery)	
	<u>Item No:14</u> Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, Premixed with bituminous binders and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with tandem rollers to achieve the desired compaction as per MORTH specification Clause No. 500.9 complete in all respects complete as per specifications					3079.00 Sqm. @TR 12/12 = 39164.88/-	

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558335

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1	2	3	4	5	6	7	8
	North Specification No 509- using 40/60 TPH Capacity 11. M.P. with mechanical Paver Gr-11 (30 mm to 45mm) with 6% VG-30 Bitumen. (Bill Page No. 6 to 7)						
	Item No: 18 Road marking with Hot Applied Thermoplastic Compound with reflectorising glass Beads on Bituminous surface: Providing and laying of hot applied thermoplastic compound 2.5mm thick including reflectorising glass beads at 250 gm per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks						
						123.16 cum @TR 1000.10 = 1231735.47/-	

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558936

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1	2	3	4	5	6	7
	<u>Certificate:</u> * Certified that the work done satisfactorily. * Certified that there are no departmental issues. * Certified that the debris removed from work spot. <i>[Signature]</i> Assistant Executive Engineer Kodigehalli Sub Division BBMP, Bangalore					

(K. V. S.)
(on file)

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Date	Full description, etc., of work	Dimensions				Contents	Reference to last measurement
		Number	Length	Breadth	Depth		
1		3					
2		4					
		5					
		6					
		7					
		8					

INDEX
 Asphalt -
 R.C.C Drain -
 Deck Slab -

Assistant Executive Engineer
 Kodigehalli Sub Division
 BBMP, Bangalore

55837

55837

Date of commencement of work.....

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